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June 3, 2005

Mr. Jim Hogan  
Bureau Water Pollution Control  
Nevada Division of Environmental Protection  
333 West Nye Lane  
Carson City, NV 89706

Subject: NPDES Permit #NV0023060 Application for Renewal

Dear Mr. Hogan:

Kerr-McGee Chemical LLC, Kerr-McGee, maintains an NPDES Permit #NV0023060, for treated water discharge associated with the perchlorate remedial activities in the Henderson, NV area. In February, 2005 Kerr-McGee submitted a renewal application for the subject permit and this correspondence provides addition information to supplement that application.

In the renewal application Kerr-McGee requested a reduction in selected constituent sampling frequency and/or constituent number. This was done following a five-year data collection period for these constituents. Utilizing as a basis EPA's April 1996 guidance document *Interim Guidance for Performance Based Reduction of NPDES Permit Monitoring Frequencies*, and referencing the attached graphs, Kerr-McGee provides the following information to justify the reductions. In its guidance document EPA provides 3 criteria for each constituent.

- The first criteria is not constituent specific, but references the facility's enforcement history. There have been no criminal convictions for any environmental statute nor any NPDES civil judicial or administrative enforcement action associated with this permit. This is true for all constituents.
- The second criteria is critical constituent specific and evaluates the compliance history of critical constituents. Perchlorate is considered the critical constituent for this remedial effort and there are no monitoring reductions requested for this constituent. However, in reviewing the NPDES Discharge Monitoring Reports (DMRs) for the period covering the current technology for perchlorate reduction, perchlorate discharge concentrations have been in compliance with permit requirements.
- The third criteria covers those constituent for which a monitoring reduction is requested. Allowable reductions are based upon comparison of the monitored composite average to the permit limits. Please see Table 1 for this comparison.

**Table 1**

Constituent Table 1	Location	Monitored Average Value	Permit Limit	EPA's Guidance Document Reduction	Reduction Requested
pH	Effluent	7.1 su	6.5 su to 9.0 su	1/wk to 1/ 2mos	1/wk to 1/mo
Total Suspended Solids	Effluent	12 mg/l	135 mg/l	1/wk to 1/2 mos	1/wk to 1/mo
Iron	Effluent	0.99 mg/l	10 mg/l	1/wk to 1/ 2mos	1/wk to 1/mo
Manganese	Effluent	0.43 mg/l	5 mg/l	1/wk to 1/ 2mos	1/wk to 1/qtr
Total Dissolved Solids	Wash: Upgradient, LVW 6.05, LVW 5.5	~1600 mg/l each location	2400 mg/l	2/mo to 2/mo	2/mon to 1/qtr
Total Inorganic Nitrogen	Wash: Upgradient, LVW 6.05, LVW 5.5		17 mg/l	2/mo to 2/mo	2/mo to 1/qtr

\* To be supplied.

- In addition, there are a number of monitored constituents for which there are no permit limits, but which were monitored during the permit term to amass data to understand regional conditions. These are listed in Table 2.

**Table 2**

Constituent Table 2	Location	Monitored Average Value	Permit Limit	EPA's Guidance Document Reduction	Requested Reduction
Total Dissolved Solids	Effluent	5795 mg/l	None	NA	1/wk to 1/qtr
Color	Effluent	5.8 acu	None	NA	1/wk to 1/mo
Total Inorganic Nitrogen	Effluent	8 mg/l	None	NA	1/wk to 1/mo

Constituent Table 2	Location	Monitored Average Value	Permit Limit	EPA's Guidance Document Reduction	Requested Reduction
Un-Ionized Ammonia	Effluent	1.0 %	None	NA	1/wk to 1/mo
Total Kjeldahl Nitrogen	Effluent	1.57 mg/l	None	NA	1/wk to 1/mo
Nitrate	Effluent	7.9 mg/l	None	NA	1/wk to 1/mo
Sulfide	Effluent	0.1 mg/l	None	NA	1/wk to 1/mo
Chlorate	Effluent	66 mg/l	None	NA	1/wk to 1/mo
Chloride	Effluent	2004 mg/l	None	NA	1/wk to 1/qtr
Oil and Grease	Effluent	Not Detected at an average detection limit of 2.11 mg/l	None	NA	1/wk to 1/qtr
Boron	Effluent	2.99 mg/l	None	NA	1/wk to 1/qtr
Radium 226 / 228	Effluent	1.06 pCi/l	None	NA	1/wk to not monitored
Gross Alpha	Effluent	23.5 pCi/l	None	NA	1/wk to not monitored
Attachment A Constituents	Effluent	Varied	None	NA	1/qtr to 1/yr
Color	Wash: Upgradient, LVW 6.05, LVW 5.5	15 to 20 acu	None	NA	2/mo to 1/qtr
Total Iron	Wash: Upgradient, LVW 6.05, LVW 5.5	~0.3 mg/l	None	NA	2/mo to 1/qtr
Manganese	Wash: Upgradient, LVW 6.05, LVW 5.5	~55 ug/l	None	NA	2/mo to 1/qtr
Total Chromium	Wash: Upgradient, LVW 6.05, LVW 5.5	~2 ug/l	None	NA	2/mo to 1/qtr

Constituent Table 2	Location	Monitored Average Value	Permit Limit	EPA's Guidance Document Reduction	Requested Reduction
Boron	Wash: Upgradient, LVW 6.05, LVW 5.5	~0.7 mg/l	None	NA	2/mo to 1/qtr
Chloride	Wash: Upgradient, LVW 6.05, LVW 5.5	~330 mg/l	None	NA	2/mo to 1/qtr
Radium 226/228	Wash: Upgradient, LVW 6.05, LVW 5.5	~0.8 pCi/l	None	NA	2/mo to not monitored
Gross Alpha	Wash: Upgradient, LVW 6.05, LVW 5.5	~7 pCi/l	None	NA	2/mo to not monitored
Molybdenum	Wash: Upgradient, LVW 6.05, LVW 5.5	~23 ug/l	None	NA	2/mo to not monitored
Copper	Wash: Upgradient, LVW 6.05, LVW 5.5	~7 ug/l	None	NA	2/mo to not monitored
Fluoride	Wash: Upgradient, LVW 6.05, LVW 5.5	~1.1 mg/l	None	NA	2/mo to not monitored

NA: The guidance is not applicable to this constituent.

The process related terms, named in Tables 1 and 2 and in previous correspondences, are as follows:

- Effluent (and IX Effluent) is the end of the pipe discharge from the treatment process.
- Influent is the influent to the biological process.
- IX Influent is the influent to the IX process
- ISEP Influent is the influent to the IX "ISEP / PDM" process.

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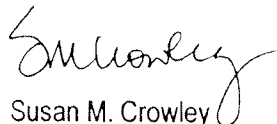
The wash locations named in Tables 1 and 2 are described as follows:

- The Upgradient location is defined in the permit as 150 feet upstream of the discharge flow into the wash
- LVW 6.05 is located 6.05 miles upstream of the confluence of the Las Vegas wash with Lake Mead.
- LVW 5.5 is located 5.5 miles upstream of the confluence of the Las Vegas wash with Lake Mead.
- LVW 0.55 is located 0.55 miles upstream of the confluence of the Las Vegas wash with Lake Mead. This location is also known as "North Shore Road".

Please find attached constituent graphs which support the information above as well as provide information on several constituent for which no change is requested. These later constituent graphs are provided for your information.

Please feel free to call me if you have any questions regarding this information

Sincerely,



Susan M. Crowley  
Staff Environmental Specialist

Express Mail (and electronically via e-mailed .pdf)

CC: Brian Rakvica  
Keith Bailey  
Rick Stater  
Todd Croft  
Jeff Lambeth

Attachment